

Research/Instruction Involving Recombinant and Synthetic Nucleic Acid Molecules
Notification Form

SUNY New Paltz Institutional Biosafety Committee (IBC)

APPLICABILITY STATEMENT

The State University of New York (SUNY) at New Paltz is committed to the safe conduct of experiments involving recombinant and synthetic nucleic acid molecules (R/SNAM), as well as to the protection of health and of the environment. In consideration of these commitments and of the SUNY New Paltz facilities available for such research, all activities involving R/SNAM conducted under the auspices of SUNY New Paltz must conform with the New Paltz Policy Statement on research involving R/SNAM. Such activities must comply with the intent as well as the specifics of the *NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules* and the subsequent amendments to the guidelines ([NIH Guidelines](#)).

Additional restrictions are described in the SUNY New Paltz Policy Statement for Research Involving Recombinant Synthetic Nucleic Acid Molecules, which supersedes the NIH Guidelines.

Definitions

Recombinant and synthetic nucleic acids are defined as:

- (i) molecules that a) are constructed by joining nucleic acid molecules and b) that can replicate in a living cell, i.e., recombinant nucleic acids;
- (ii) nucleic acid molecules that are chemically or by other means synthesized or amplified, including those that are chemically or otherwise modified but can base pair with naturally occurring nucleic acid molecules, i.e., synthetic nucleic acids, or
- (iii) molecules that result from the replication of those described in (i) or (ii) above.

Laboratory work involving small DNA molecules such as oligonucleotides, PCR primers, PCR products, and nucleic acid probes do not require registration with IBC if the following applies: Those synthetic nucleic acids that: (1) can neither replicate nor generate nucleic acids that can replicate in any living cell (e.g., oligonucleotides or other synthetic nucleic acids that do not contain an origin of replication or contain elements known to interact with either DNA or RNA polymerase), and (2) are not designed to integrate into DNA, and (3) do not produce a toxin that is lethal for vertebrates at an LD50 of less than 100 nanograms per kilogram body weight. Additional insight into the guidelines can be found at their [Frequently Asked Questions](#).

- **If your research or instructional activities involve the use of recombinant or synthetic molecules as defined above, completely fill out this form.**
- **The information must be submitted at least one month prior to commencement of activities.**
- **The IBC registration form for R/SNAM must be submitted annually for on-going projects.**

IBC NOTIFICATION FORM: R/SNAM

Check one: New Project Renewal
Project Title:
Principal Investigator and department affiliation (if more than one, include name and affiliation of each):
Corresponding PI campus address:
Corresponding PI campus phone:
Corresponding PI campus email:
Laboratory space(s) in which activities will take place (Bldgs, rooms):
Course in which recombinant or synthetic nucleic acid molecules will be used (if applicable, number and name):
Name and brief description of R/SNAM (ex. gene name and function):

1. Will you be performing ANY recombinant nucleic acid molecule experiments/ instructional activities that are NOT encompassed by one or more of the following allowable types of experiments?

Yes No

- Recombinant DNA containing less than half of any eukaryotic viral genome in tissue culture
- *Escherichia coli K-12*, *Saccharomyces*, asporogenic *Bacillus subtilis* or asporogenic *Bacillus licheniformis* Host-Vector Systems without conjugative plasmids or generalized transducing phage
- Extrachromosomal elements of Gram-positive microorganisms (NIH Guidelines, Appendix C)
- Recombinant DNA consisting entirely of segments from the same species, closely related strains of the same species, or species known to naturally exchange DNA
- DNA from Risk Group 1

2. Will you be performing ANY recombinant nucleic acid molecule experiments/instructional activities with Host-Vector systems that are NOT in the Risk 1 category? If 'yes', complete the supplemental notification form

Yes No

3. Will organisms (including cells in culture) or viruses containing recombinant nucleic acid molecules be cultured in volumes exceeding 10L?

Yes No

4. Will recombinant nucleic acid molecules be derived from risk groups 2-4 organisms?

Yes No

5. Will genes coding for the biosynthesis of molecules toxic to vertebrates be deliberately cloned?

Yes No

6. Will there be a deliberate attempt to express a protein?

Yes No

If *Yes*, name the protein and describe how expression of the inserted DNA sequences will result in differences from the non-modified parental organism (e.g., morphological or structural characteristics, physiological activities and processes, growth characteristics). Indicate possible toxicity or other hazards, if any:

Indicate your initial determination of the required levels of physical and biological containment (**BL1-2 (BL3 & 4 are not allowable)**) in accordance with the NIH Guidelines (Appendix B):

Please mail the completed R/SNAM Registration Form (without the applicability statement) to the Institutional Biosafety Committee c/o Sponsored Programs or email (with electronic signature, saved as a pdf and renamed with your last name and date) to ibc@newpaltz.edu.

I have read and I understand the Principle Investigator Responsibilities outlined in the NIH Guidelines for Research Involving R/SNAM and the SUNY New Paltz Policy Statement for Research Involving R/SNAM. I certify that the information in this questionnaire is correct and that the research will be conducted in full compliance with SUNY New Paltz policies and federal regulations. I take full responsibility for training all students who will be involved in the recombinant nucleic acid molecule experiments/ instructional activities.

Signature of corresponding Principal Investigator

Date

Supplemental Notification Form

Name(s) of Risk Group 2 Host-Vector systems:

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Complete the description of the general practices to be performed for BL2 containment of Risk Group 2 Host-Vector systems. Where appropriate, you may indicate compliance by entering the word 'yes'.

General practice	Description for this lab/application
Biological safety cabinets (Class I or II) or other appropriate personal protective or physical containment devices are used whenever opening containers of Risk Group 2 organisms.	(e.g. give brand of biosafety cabinet and date of last check)
Work surfaces are decontaminated at least once a day and after any spill of viable material.	(e.g. ethanol decontamination statement)
All contaminated liquid or solid wastes are decontaminated before disposal. An autoclave for decontaminating laboratory wastes is available.	(e.g. autoclave and/or bleach statement)
If sharps are used, precautions are taken to prevent exposure via a puncture.	(e.g. auto-remove sharps container)
Mechanical pipetting devices are used; mouth pipetting is prohibited.	
Biohazard signs are posted on all entrances to the work area. Eating, drinking, smoking, and applying cosmetics are not permitted in the work area.	
Persons wash their hands (i) after handling materials involving Risk Group 2 organisms, and (ii) when exiting the laboratory.	
All procedures are performed carefully to minimize the creation of aerosols.	
Contaminated materials leaving the laboratory are placed in a durable leak-proof container which is closed and put in secondary containment before being removed from the laboratory.	
The Principal Investigator limits access to the laboratory. The Principal Investigator has the final responsibility for assessing each circumstance and determining who may enter or work in the laboratory.	(e.g. doors lock and are opened by card or key access available to specific, named individuals)
The Principal Investigator establishes policies and procedures whereby only persons who have been advised of the potential hazard and meet any specific entry requirements may enter the laboratory.	(Statement about student training)
An insect and rodent control program is in effect.	(e.g. campus procedure is in place)
Laboratory coats, gowns, smocks, or uniforms are worn while in the laboratory. Before exiting the laboratory for non-laboratory areas (e.g., computer lab, bathroom, offices), this protective clothing is removed and left in the laboratory or covered with a clean coat not used in the laboratory.	
Gloves are worn whenever opening containers containing Risk Group 2 organisms.	
Medical evaluation, surveillance, and treatment are provided as appropriate and written records are maintained.	

The laboratory is designed so that it can be easily cleaned. Bench tops are impervious to water and resistant to acids, alkalis, organic solvents, and moderate heat. Laboratory furniture is sturdy and spaces between benches, cabinets, and equipment are accessible for cleaning.	
Each laboratory contains a sink for hand washing.	
There are no windows or if the laboratory has windows that open, they are fitted with fly screens.	

All of the above practices will be implemented while conducting the activities described on the notification form.

I am aware that any spills and accidents which result in overt exposures to organisms containing recombinant or synthetic nucleic acid molecules must be immediately reported to the Institutional Biosafety Committee, the Biological Safety Officer, and NIH OSP. Reports to NIH OSP shall be sent to the Office of Science Policy, National Institutes of Health, preferably by e-mail to: NIHGuidelines@od.nih.gov; additional contact information is also available on the [OSP website](#).

I have read and understood [The Laboratory Safety Monograph](#) and [Biosafety in Microbiological and Biomedical Laboratories \(BMBL\) 5th Edition](#).

All researchers in the lab will have read and understood the Standard Operating Procedures (SOP) for the lab prior to initiation work. The SOP document is available for review upon request.

Signature of corresponding Principal Investigator

Date